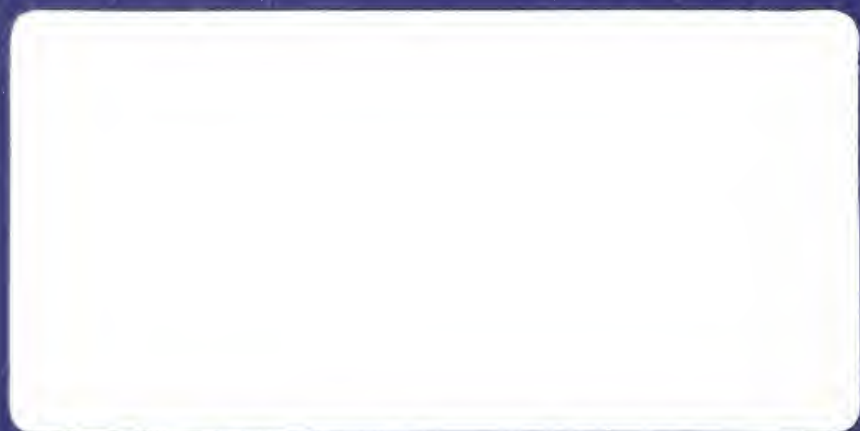




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**U.S. Information Services Market
Analysis Program**

Business Services

***Information Services Opportunities and
Trends, 1994-1999 Forecast Update***

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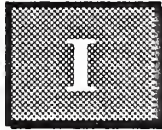
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Introduction

A

Purpose

The objectives of this forecast update are to:

- Identify the business and technological issues and trends driving the use of information services within the business services sector
- Forecast user expenditures on information services during the next five years for the business services sector
- Discuss the competitive environment and profile-leading vendors in the business services sector

The emphasis is on updating INPUT's 1993 forecasts and forecast assumptions for the business services industry sector and on noting changes in forces impacting this market over the last eight months. The report provides readers with insights and information that will help:

- Review forces shaping the market
- Develop internal corporate financial projections
- Identify new markets and product and services opportunities
- Assess competitive trends
- Determine potential market directions
- Assist in prioritizing investments

B**Sector Definition**

The business services sector contains a number of widely varying businesses that provide services for a fee or on a contractual basis, rather than produce tangible goods. Another common characteristic is these businesses are participating in a massive transition in the U.S.—from an industrial to a service-oriented economy. Exhibit I-1 shows the sector components covered in this report.

Exhibit I-1

Components of Business Services Sector

SIC	Subsector	No. of Establishments (Thousands)
65	Real Estate	217.0
70	Hotels, Other Lodging Places	50.6
72	Personal Services	186.1
73	Business Services	292.3
75	Automotive Repair, Services, Parking	156.6
76	Miscellaneous Repair Services	67.4
78,79,84	Amusement and Recreation, including Motion Pictures and Museums	113.1
81	Legal Services	142.4
83	Social Services	115.6
86	Membership Organizations	218.2
87	Engineering, Accounting, Research Management and Related Services	201.1
	Total	1,760.4

Source: U.S. Bureau of the Census, 1990 County Business Patterns

The business services sector includes a broad range of activities. Each of the categories in Exhibit I-1 can be further broken down, as shown in Exhibit II-2.

Exhibit I-2

Business Services Sector SIC Groupings

SIC Group	Description
65	Real Estate Operators and Lessors; Real Estate Agents and Managers; Title Abstract Offices; Land Subdividers and Developers
70	Hotels and Motels; Rooming and Boarding Houses; Camps and Recreational Vehicle Parks; Organization Hotels and Lodging Houses on a Membership basis
72	Laundry, Cleaning, and Garment Services; Photographic Studios; Portrait; Beauty Shops; Barber Shops; Shoe Repair and Shoeshine Parlors; Funeral Services; and Miscellaneous Personal Services
73	Advertising, Consumer Credit, and Mercantile Reporting Agencies; Adjustment and Collection Agencies; Mailing; Reproduction; Commercial Art and Photography; Stenographic Services; Services to Dwellings; Miscellaneous Equipment Rental and Leasing; Personnel Supply; Computer Programming; Data Processing and other Computer-Related Services; and Miscellaneous Business Services
75	Automotive Rental and Leasing, Without Drivers; Automobile Parking; Automotive Repair Shops; and other Automotive Services
76	Electrical Repair Shops; Watch, Clock and Jewelry Repair; Reupholstery and Furniture Repair; and Miscellaneous Repair Shops
78	Motion Picture Production; Distribution and Allied Services; Theaters; and Video Tape Rental
79	Dance Studios, Schools and Halls; Theatrical Producers; Bands, Orchestras, and Entertainers; Bowling Centers; Commercial Sports; and Miscellaneous Amusements and Recreation Sports
81	Legal Services
83	Individual and Family Social Services; Job Training and Vocational Rehabilitation Services; Child Care Services; and Residential Care Services
84	Museums and Art Galleries; and Arboreta and Botanical Or Zoological Gardens
86	Businesses Associations; Professional Membership Organizations; Labor Unions and Similar Labor Organizations; Civic, Social, and Fraternal Organizations; Political Organizations; Religious Organizations; and other Membership Organizations
87	Engineering, Architectural, and Surveying Services; Accounting, Auditing, and Bookkeeping Services; Research, Development, and Testing Services; Management and Public Relations Services
89	Services Not Elsewhere Classified

Most of the categories can be further segmented into still smaller categories. There are specific computing services aimed at many of these individual categories. Automated Case Management Systems Inc., has developed IMACS, a case management software package created specifically for social services organizations providing AIDS care.

George Lucas' Industrial Light and Magic has teamed with Silicon Graphics to further develop and enhance digital imaging systems for the motion picture special effects industry.

The majority of firms in the business services arena are of the mom-and-pop variety. In legal services, for example, out of tens of thousands of law firms, fewer than 2%, have 25 or more lawyers, and fewer than 1,000 firms have 50 lawyers or more. Of the roughly 40,000 firms in the engineering, architectural and surveying segments, fewer than 100 of them employ more than 500 people, and three quarters employ fewer than 20.

A fundamental reason for this high degree of fragmentation is services are often produced on the customer's premises or the customer must come to where the service is provided. Thus, the vendor must have a presence in the region where the customers are located. Other factors encouraging fragmentation are the diverse market needs and low market entry barriers.

C

Key Issues

The issues discussed in this report are consistent with business services concerns noted in the 1993 report. They include:

- Business services customers are under pressure to control their own costs, and so vendors are obligated to provide services that will be effective and cost-efficient.
- Service providers are in a dynamic state whereby they must devise innovative product and marketing strategies in order to achieve success in the business services market.

- Business services companies may also be under internal pressure to refine their own operations and control costs with such technologies as client/server computing and outsourcing, in order to more effectively offer products and support to the customer.
- Fluctuations in the U.S. economy can provide opportunities for business services providers from customers who need to reduce their own internal costs. However, some business service segments, such as real estate and hotels, can reduce business service opportunities as the economy shrinks particular markets. Since INPUT's 1993 report, the U.S. economy has begun a slow recovery from recession, creating a favorable atmosphere for information services spending.

D

Organization

In addition to this introductory chapter, this report contains analyses of the business services market as described below:

- Chapter II, Trends, Events, and Issues—discusses changes, market issues and activities, and competitive factors in the business services sector that have an impact on present and future information services use in the market.
- Chapter III, Information Services Market Forecast—presents an analysis of information services expenditures for the business services applications market by product/service market and submode.
- Appendix A, Forecast Database—presents a detailed forecast by product/service market and subsector for the business services cross-industry market. A reconciliation of the 1993-1998 forecast is also provided.

E

Methodology

Much of the data this report is based on has been gathered during the first quarter of 1994 as part of INPUT's ongoing market analysis program. Trends, market sizes and growth rates are based upon INPUT research and interviews with users in the business services cross-industry market and with the information

services vendors serving this market. INPUT maintains ongoing relationships with all users and vendors interviewed and keeps track of these relationships in a database. Interviewees for the research segment of this report were selected from the INPUT contact database.

In addition, INPUT made extensive use of its corporate library located in Mountain View, California. The resources of this library include: on-line periodical databases; subscriptions to a broad range of computer and general business periodicals; continually updated files on more than 3,000 information services vendors; and the most up-to-date U.S. Department of Commerce publications available on industry issues.

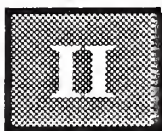
INPUT must note that some vendors may be unwilling or unable to provide detailed revenue breakdowns by product/service market or industry. Also, vendors often use different categories for industries and industry segments, or may place their services in different product/service markets than the ones INPUT uses. Therefore, INPUT must estimate revenues in these categories on a best-effort basis. For these reasons, readers must regard the product/service market and individual segment forecasts as indicators of general patterns and trends rather than as specific, detailed estimates for individual years.

F

Related Reports

Related reports of interest to the reader follow:

- *U.S. Application Solutions Market, 1994-1999*
- *U.S. Systems Software Products Market, 1994-1999*
- *U.S. Professional Services Market, 1994-1999*
- *Systems Integration Trends and Forecasts, 1994-1999*
- *Information Systems Outsourcing Market Opportunities, 1994-1999*
- *U.S. Network Services Market, 1994-1999*
- *Information Services Industry Sector Reports, 1994-1999 (15 reports on all major industry sectors)*
- *Information Services Cross-Industry Markets, 1994-1999*



Trends, Events and Issues

The diverse nature of the establishments in the business services sector makes it challenging to identify and track common trends. The services these firms provide are myriad; therefore, the issues and requirements have few elements in common with other vertical markets. INPUT has summarized key business trends that impact most business services firms, as shown in Exhibit II-1. These trends have become evident over the last several years and should continue through the forecast period.

Exhibit II-1

Key Business Trends

- Cost-control pressure
- Innovative marketing of services
- Delivery of new types of services
- Economic fluctuations

The transition from an industrial to a service-oriented economy continues in the U.S. Companies continue to focus on strategic areas that contribute to the bottom-line profitability of the firm. As more companies cut back on their nonstrategically focused departments, the demand increases for providers of outside business services.

Services firms, in general, are less sensitive than nonservice firms to economic conditions because they lack heavy fixed-costs. As the economy contracts, external business services rather than internal service development, is viewed as a way to contain costs.

The good news is that as the U.S. economy continues the recovery begun during late 1993, business service use will increase, particularly in the leisure-related segments.

However, this sector remains prey to certain negative economic effects, which include the following:

- The transaction-based buying and selling firms, such as real-estate brokers, agents and credit-reporting agencies, will see slowing demand for their services transaction demands decrease. This is particularly true for real estate, which is among the first, most negatively affected business segments in our economic downturn.
- The recession caused an economic retrenchment for the lodging industry in general. Hotel construction is down compared with the 1980s although revenues for larger chains, such as Marriot, have grown respectably over the last several years.

The consumer services segment of business services will likely become one of the prime motivators for further development of the nascent information superhighway. The race to establish on-line video and multimedia products in the American home, serves as an opportunity catalyst for companies such as Bell Atlantic and Telecommunications Inc., who are independently developing digital on-line video aimed at the consumer market.

Profitability remains as important in the business services sector as in other industry sectors. Firms are still seeking more direct and innovative ways to market services and are grappling with questions, such as what they can do to improve marketing strategies and distinguish themselves from the competition. Consumer-focused products are currently considered a more profitable superhighway development goal. Yet, the implication for telecommunication and on-line business informational services could radically alter American work processes.

The hotel market is examining the benefits of gathering and analyzing information on their customers so as to tailor services to both increase the number of new customers and encourage repeat business. In September 1993, Hyatt Hotels unveiled a UNIX-based reservation system which links more than 900 Hyatt agents with more than 100,000 travel consultants on a 24-hour per

day basis, worldwide. Using AT&T hardware and a Informix database, the client/server system processes 200 travel-related transactions per second, with a maximum one second response time. The system allows Hyatt to handle six million reservations a year at 60% of the company's previous annual operation costs.

As in the transportation area, reservation systems for the hotel industry are an important way of getting and keeping customers by providing services. Externally, on-line Bulletin Board Systems (BBS) providers such as American On-line, Compuserve, Prodigy and Seattle-based ProStar Plus, aid hotel and motel business through their own reservation subsystems.

Currently, there is also a change in focus for law firms taking place as they face increasing pressure to implement information technology and thereby move further into the 20th century. To this end, legal professionals have begun to use personal computers as more than just financial tracking tools, but also as means of tracking cases and presenting evidence. In the 1992 murder trial of San Francisco adult entertainment king, Jim Mitchel, prosecutors presented a computer-animated re-creation of the crime to the presiding judge. This was the first time such evidence was allowed, and started a growing trend in American courts. The software and systems for this function range from \$100 to \$100,000 depending on the level as complexity required.

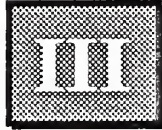
Many of the business services subsegments provide services that are difficult to differentiate. Enhanced service differentiation and, therefore, potentially higher profit margins, may be achievable by increasing the added value of the business. For example, some accounting firms are offering electronic submission of income tax documents to speed tax return processing and refunds to consumers. Other accounting firms offer short-term loans to cover the cost of income tax payments.

Service providers—like companies in all industries—are looking to information services and technology to boost profits or at least minimize losses. Economic uncertainties caused by the North American Free Trade Agreement, battles over U.S. trade deficit and a mercurial faith in the Clinton Administration have forced business service providers to improve their own business processes in order to remain more competitive. For example, Automatic Data Processing, Inc.'s Automotive Claims Services Group provides claims adjusters with notebook PCs connected

through wireless telecommunications networks to a mainframe-based auto repair estimating application. The system allows adjusters to download inventory and pricing information and thereby, serve customers more quickly.

Information services that help to achieve the objectives of increasing operating efficiencies, fine-tune operations and make marketing more innovative, are positively influenced by the trends and issues impacting services.

Improved service as a whole, particularly the ability to respond to requests for information before and during the sale, and for service during and after the sale, is a key business trend today. The trend is fueled to some extent by the general shift toward service as a product and the overall movement toward a service economy. As a result, information services that enhance availability of, and access to, information will experience healthy growth.



Information Services Market Forecast

INPUT has adjusted its 1994 forecast from the previous year to reflect user expenditures that were higher than predicted in 1993. Information in this chapter draws on the trends, events and issues presented in Chapter II. Section A: Overview—discusses the overall size and growth of user expenditures. Section B: Product/Service Market Analysis—provides discussions of factors affecting each sector on an individual basis.

A

Overview

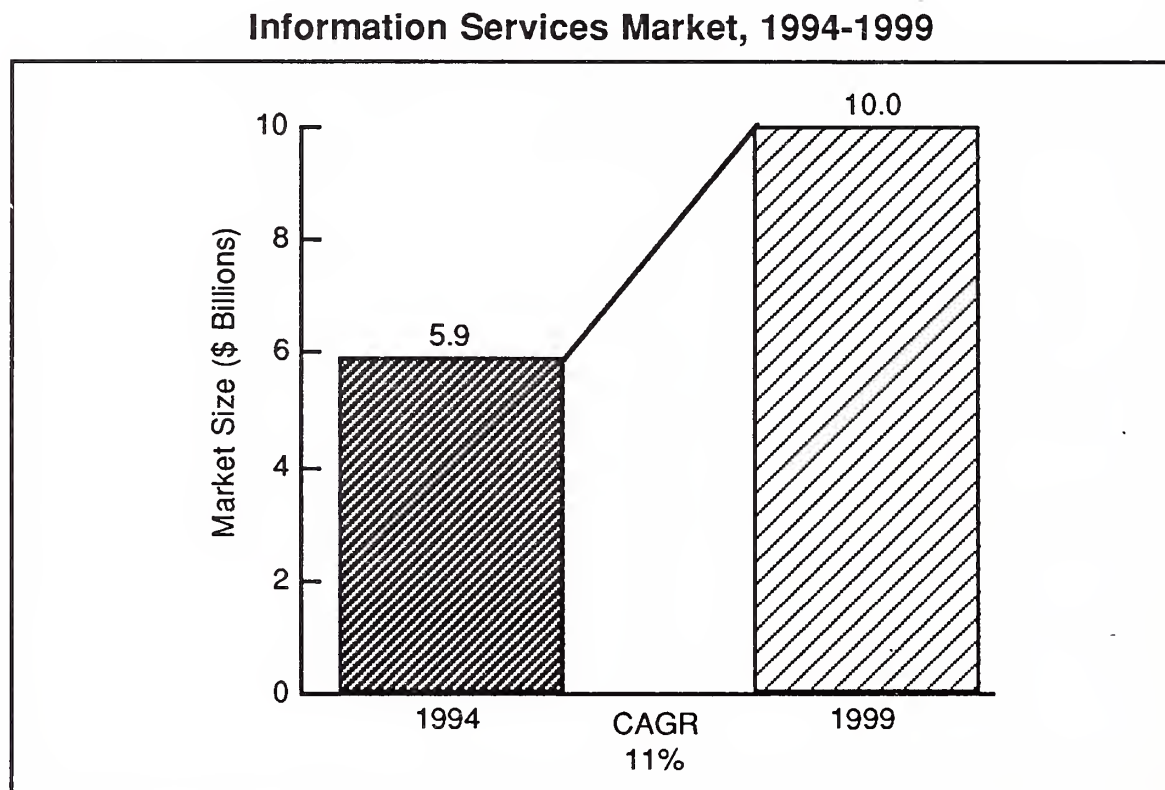
The pressure to operate more efficiently continues to fuel growth in the business services market. As more powerful hardware and software make it possible to automate businesses at lower and lower costs, penetration of smaller services firms will continue.

As many of the largest services subsectors rely on providing expertise on demand, information services that enhance easy access to information will continue to grow rapidly. Information services products and services that keep the market research people in touch with their markets and close to the needs of their clients are extremely important to the continued success and focus of many companies. Therefore, although needs are not sharply focused, there are continuing demands for networks and on-line databases.

INPUT forecasts a 11% compound annual growth rate (CAGR) for the business services sector from 1994 to 1999. The forecast, provided in Exhibit III-1, reflects growth rates generally comparable to those in 1993, but at higher actual expenditures.

Processing services and turnkey systems, for example, are predicted to maintain consistent growth but at a slightly higher expenditure levels.

Exhibit III-1



The forecast reflects greater expenditures on workstation/PC-based applications software products than reported last year, while it shows falling levels of minicomputer and mainframe applications expenditures.

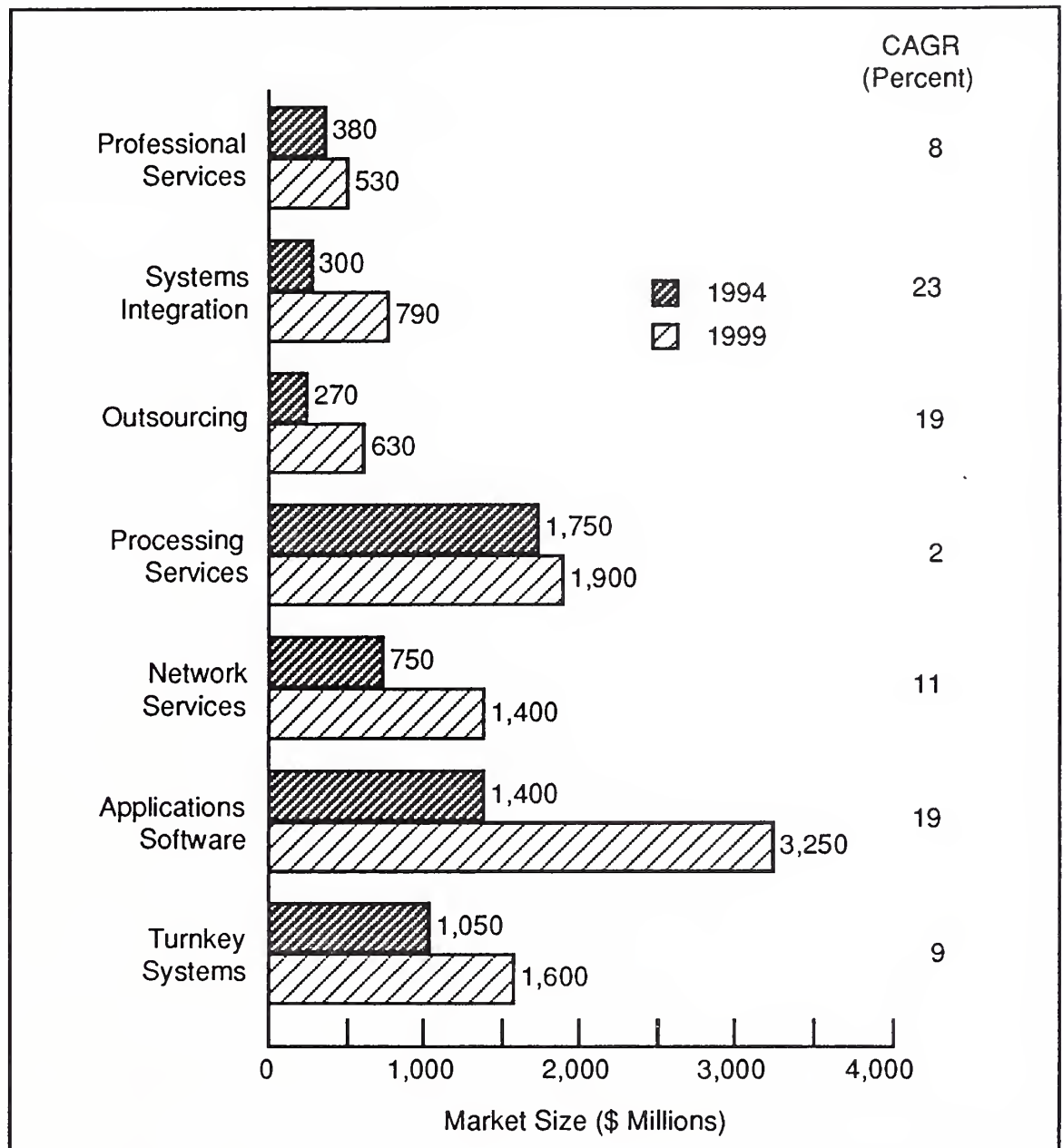
B

Product/Service Market Analysis

Exhibit III-2 provides forecasts of user expenditures by product/service market. Many businesses are becoming more likely to purchase outsourcing, systems integration and professional services. However, because the business services sector is composed predominantly of small businesses, expenditures on these product/service markets are low compared to network services and applications software products.

Exhibit III-2

Information Services Market by Product/Service Sector— 1994-1999



Note: Numbers are rounded

The fastest growing product/service markets, nonetheless, are outsourcing and systems integration. One reason for the high growth is that these product/service markets start from a relatively small expenditure base, which can also include bundled applications software and network services. Also, contracts, particularly for outsourcing, tend to be long-term, thus, bolstering long-term market value.

Processing services will remain the largest product/service market in the market, although by 1996, expenditures on applications software products are expected to surpass the demand for processing services. By 1999, applications software will be the largest sector, at nearly twice the value of processing services.

1. Professional Services

The 1994 forecast for professional services for the business services sector has increased slightly from the 1993 forecast, yet forecast growth fell from a 9% to a 7% CAGR. Many of the market trends that fuel the growth in expenditures for professional services will continue over the next few years. These trends include the following:

- Companies like Andersen Consulting and Electronic Data Systems continue to seek and derive profit from business services consulting, which is still a viable subsector.
- Software development will continue fulfilling a need for the multitude of business services companies that provide specific and specialized services, such as museums, galleries and funeral services. These are small markets that can rely more heavily on packaged application software products for most fundamental software needs.

2. Systems Integration

Even though the CAGR is 22%, the relatively low starting base of \$297 million in 1994 will increase to \$790 million in 1999. Systems integration is a small but important category of the business services information services market. Forecasted growth represents prospects in business services for PC/workstation platform and specialized applications software integration. The professional services component, as the largest subsector, represents the umbrella, under which many systems integration services are offered.

Systems integration expenditures typically represent large contracts only. INPUT assumes that only the large business services companies will use systems integrators over the forecast period. However, as small businesses grow, or merge with other

firms to form larger companies, integration services demand will likely increase.

3. Outsourcing

Outsourcing, a relatively newer service sector in business services, will grow at a CAGR of 19% between 1994 and 1999 from a base of \$270 million to \$630 million in 1999.

Recent economic troubles faced by many firms have inclined them toward using outsourcing as a strategic and economical measure. Even notable exceptions from past forecasts, such as hotel chains and large entertainment and amusement businesses, are concentrating on their core business technology in order to cost effectively re-engineer their own systems with outsourced solutions from companies like Hotel Information systems and Dun and Bradstreet Information Services. Additionally, the trend toward client/server computing solutions will cause a substantial increase in the desktop services subsector, while growth in platform operations growth slows as mainframe technology gets supplanted.

4. Processing Services

The business services sector is the third largest user of processing services of all of the industries examined by INPUT, surpassed only by banking and finance and transportation. Yet, for their large base of processing services expenditures, business services is one of the slowest growth industry sectors.

The largest single subsector using processing services is accounting firms—for tax preparation. This market continues to remain strong although it is feeling erosion from increasing purchases of inexpensive PC-based tax preparation software, from vendors such as Intuit and Peoplesoft. Other sectors using processing services include hotels for reservation systems and regular business services, which include consumer credit and mercantile reporting agencies as well as collection agencies.

Even small companies that a few years ago were purchasing processing services, now prefer to purchase PC-based applications software products. To bolster sales, processing services firms have expanded their provision of remote transaction processing and printing services, thereby allowing

control over their own data entry and printout. Still, this sector is expected to grow very moderately from \$1,750 million in 1994 to \$1,900 million in 1999, a CAGR of 2%.

5. Network Services

Network services will account for approximately 13% of the total 1994 business services forecast for 1993. Network services is expected to have an overall growth rate of about 13%, with network applications subsector higher at 22% growth over the next five years. Network services expenditures are expected to be approximately \$1,400 million by 1999. This forecasted CAGR is two points higher than INPUT's 1993 forecast.

The majority of network services expenditures is for electronic information services, as opposed to network applications such as electronic data interchange (EDI) and commercial electronic mail. Many of the business-oriented services firms, particularly accounting and law offices, require constant access to information. Databases and directories that best lend themselves to on-line distribution require frequent updating and other services involving transactions. Alternative in-house paper-based systems are more costly and, in many cases, literally impossible to maintain.

New variations and specialized information that suit the fragmented nature of the business services sector will become increasingly available and fuel growth for this product/service market.

6. Applications Software Products

Applications software products market will be a massive market over the forecast period, with growth from \$1,440 million in 1994 to \$3,250 million in 1999, a CAGR of 18%, as Exhibit III-2 shows.

Nearly 85% of expenditures are for PC and workstation-based applications software products. Minicomputer- and mainframe-based software growth is expected to generally decline as companies transition to networked PCs, or acquire new, PC-only systems. By 1998, the market for workstation/PC-based products is expected to be more than five times the market for mainframe- and minicomputer-based products combined. Companies such as

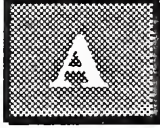
Computer Associates, Platinum and Microsoft have experienced quite healthy revenue in this market.

7. Turnkey Systems

Turnkey systems are niche businesses' answer to outsourcing and systems integration needs. However, increasing numbers of large business services firms are using integrators and applications development tools. Expenditures on this product/service market are forecast to grow steadily at 8% compounded annually. The highest growth will be in the professional services segment.

The primary growth promoter is that the business services sector will continue to contain specialized businesses, which still require turnkey systems as a form of off-the-shelf product offering. The slightly decreasing hardware content of a turnkey system continues to be a growth inhibitor.

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Forecast Database and Reconciliation

INPUT has increased its overall forecast slightly for this report. Exhibit A-1 presents INPUT's business services cross-industry sector user expenditure forecast for 1994-1999. Exhibit A-2 presents a reconciliation of the 1993-1998 forecast.

Exhibit A-1

Business Services Sector—Market Size Forecast by Product/Service Market Sector, 1993-1999

Product/Service Sectors	1993 (\$M)	Growth 93-94 (%)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	1999 (\$M)	CAGR 94-99 (%)
<i>Sector Total</i>	5,396	10	5,916	6,530	7,262	8,096	9,034	10,073	11
<i>Professional Services</i>	352	8	379	410	440	469	499	527	7
- IS Consulting	96	9	105	120	133	147	159	171	10
- Education & Training	49	8	53	57	62	68	74	83	9
- Custom Software	207	7	221	233	245	254	266	273	4
<i>Systems Integration</i>	235	26	297	361	442	540	658	794	22
- Equipment	58	29	75	89	111	131	158	205	22
- Software Products	31	19	37	46	56	72	87	103	23
- Professional Services	134	27	170	207	252	312	384	453	22
- Other	12	25	15	19	23	25	29	33	17
<i>Outsourcing</i>	221	21	267	327	388	463	542	626	19
- Platform Operations	58	10	64	77	83	97	110	119	13
- Application Operations	111	22	135	166	195	230	269	316	19
- Desktop Services	26	35	35	47	61	79	92	109	26
- Network Management	26	27	33	37	49	57	71	82	20
<i>Processing Services</i>	1,730	2	1,762	1,794	1,828	1,862	1,888	1,915	2
- Transaction Processing	1,730	2	1,762	1,794	1,828	1,862	1,888	1,915	2
<i>Network Services</i>	691	9	754	826	913	1,037	1,197	1,383	13
- Electronic Info Services	670	9	727	792	871	987	1,138	1,311	13
- Network Applications	21	28	27	34	42	50	59	72	22
<i>Application SW Products</i>	1,192	18	1,401	1,661	1,992	2,361	2,776	3,251	18
- Mainframe	118	1	119	121	122	124	125	127	1
- Minicomputer	249	6	265	290	315	343	365	380	7
- Workstation/PC	825	23	1,017	1,250	1,555	1,894	2,286	2,744	22
<i>Turnkey Systems</i>	975	8	1,056	1,151	1,259	1,364	1,474	1,577	8
- Equipment	326	7	350	384	419	450	481	519	8
- Software Products	324	8	351	377	410	439	474	499	7
- Professional Services	325	9	355	390	430	475	519	559	10

Exhibit A-2

Business Services Sector, 1994 MAP Database Reconciliation

Product/ Service Market	1993 Market				1998 Market				93-98 CAGR per data '93 Rpt (%)	93-98 CAGR per data '94 Rpt (%)
	1993 Market (Forecast) (\$M)	1994 Report (Actual) (\$M)	Variance From 1993 Forecast		1993 Market (Forecast) (\$M)	1994 Report (Forecast) (\$M)	Variance From 1993 Forecast			
			(\$M)	(%)			(\$M)	(%)		
Total	5,366	5,396	30	1	9,014	9,034	20	0	11	11
Professional Services	350	352	2	1	517	499	-18	-3	8	7
Systems Integration	231	235	4	2	656	658	2	0	23	23
Outsourcing	218	221	3	1	525	542	17	3	19	20
Processing Services	1,730	1,730	0	0	1,891	1,888	-3	-0	2	2
Network Services	685	691	6	1	1,148	1,197	49	4	11	12
Applications Software	1,182	1,192	10	1	2,771	2,776	5	0	19	18
Turnkey Systems	970	975	5	1	1,506	1,474	-32	-2	9	9

Overall, the small differences between the 1993 and 1994 forecasts reflect a healthy market which will exhibit respectable growth and increased technology implementation. The U.S. economy continues to be a concern for users, who are hedging their resources against damaging fluctuations in their particular industries even though the economy has begun to recover and spending is more forthcoming. Notable examples include the hotel and motel sector as well as the real estate sector.

The percentage differences in the 1998 forecasts for outsourcing and network services reflect this spending inclination. Yet, even though the outsourcing segment will continue growing, INPUT underestimated its future growth based upon an outsourcing which grew due to internal cost pressures caused by the 1992-1993 recession.

There is growing demand for network services, particularly electronic information services, and expenditures for this service

There is growing demand for network services, particularly electronic information services, and expenditures for this service sector have been upgraded to reflect the users' increasing demand for on-line data services. Network services will continue to experience double-digit growth as on-line, industry-specific databases become more utilized, and the information superhighway adds more lanes.

As for applications software, INPUT believes the average business services company will drive the demand for workstation- and PC-based software solutions at about the same rate as previously predicted but at higher expenditure levels. In addition, PC-based local-area network (LAN) systems have gained more popularity in the real estate and legal sectors, for example, further driving demand for applications in this area.

